

AMENDMENTS TO THE CLAIMS

1. (Canceled)
2. (Currently Amended) The method of claim ~~±~~ 23, wherein the plate material comprises electrically conductive material.
3. (Currently Amended) The method of claim ~~±~~ 23, wherein the plate material comprises carbon-based material.
4. (Currently Amended) The method of claim 3, wherein the plate material comprises carbon ~~fibre~~ fiber composite material.
5. (Currently Amended) The method of claim 4, wherein the carbon ~~fibre~~ fiber composite material is densified with a polymeric filler.
6. (Canceled)
7. (Canceled)
8. (Canceled)

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9. (Canceled)

10. (Currently Amended) The method of claim 6, wherein ~~the particulate etchant accelerator comprises~~ a sandblasting gun comprises a particulate etchant accelerator.

11. (Currently Amended) The method of claim ~~±~~ 23, wherein ~~the particulate etchant contains an abrasive medium which~~ sand, bead or grit material of said sandblasting, bead blasting or grit blasting, respectively, is harder than the plate material.

12. (Currently Amended) The method of claim 11, wherein the ~~particulate etchant~~ sand, bead or grit material comprises silica grit having a diameter of 180-220 μm .

13. (Currently Amended) The method of claim 12, wherein the plate material comprises a ~~graphitised~~ graphitized carbon-carbon composite material.

14. (Currently Amended) The method of claim ~~1~~, wherein ~~positioning~~ 23, further comprising holding the particulate etchant-resistant patterned mask ~~adjacent the plate comprises~~ ~~adhering the mask to~~ in contact with the plate material with by an adhesive substance.

15. (Currently Amended) The method of claim ~~±~~ 23, wherein the particulate etchant-resistant patterned mask is a photoresist mask.

16. (Currently Amended) The method of claim ~~±~~ 23, wherein the particulate etchant-resistant patterned mask comprises a vinyl polymer.

17. (Currently Amended) The method of claim ~~±~~ 23, wherein the pattern design determines ~~a fluid flow pattern~~ ~~having~~ a fluid entry gallery and a fluid exit gallery on the flow field plate.

18. (Original) The method of claim 17, wherein the fluid entry gallery and the fluid exit gallery are formed by etching aligned positions on opposite faces of the flow field plate such that the fluid entry gallery and the fluid exit gallery pass through the flow field plate.

19. (Currently Amended) The method of claim \pm 23, wherein the pattern design determines a sealing groove on the flow field plate.

20. (Currently Amended) The method of claim \pm 23, wherein ~~particulate etching comprises using~~ the sand, bead or grit blasting under the control of a two-axis scanning mechanism ~~to determine the~~ that determines movement of ~~the a~~ particulate etchant accelerator for sand, bead or grit material of the sand, bead or grit blasting, respectively, relative to the plate material.

21. (Currently Amended) The method of claim 20, wherein the two-axis scanning mechanism enables a predetermined movement of the plate material relative to the particulate etchant accelerator such that the movement is in the form of a raster pattern or a stepped scan pattern.

22. (Currently Amended) A flow field plate formed by :-
a. ~~positioning a particulate etchant-resistant mask~~
~~comprising a pattern design adjacent the plate, and~~
b. ~~particulate etching the plate using a particulate~~
~~etchant and a particulate etchant accelerator so that a fluid~~
~~flow pattern determined by the pattern design is formed on the~~
~~plate~~ the method of claim 23.

23. (New) A method for manufacturing flow field plates for use in fuel cells, electrolyzers and batteries which contain a fluid electrolyte comprising sandblasting, bead blasting or grit blasting, in which a particulate etchant-resistant patterned mask is used, so that a fluid flow pattern determined by a pattern design on said mask is formed on said plate material.